

A. CLASSIFICATION OF SUBJECT MATTER
I PC 7 G01N33/50 A61K39/395 A61K48/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

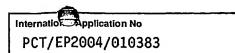
 $\label{lem:minimum} \begin{array}{ll} \text{Minimum documentation searched} & \text{(classification system followed by classification symbols)} \\ IPC 7 & G01N & A61K \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, BIOSIS, Sequence Search, PAJ

Category °	Citation of document, with indication, where appropriate, of the	Relevant to claim No.				
X	YAMAUCHI T ET AL: "Cloning of receptors that mediate antidia metabolic effects" NATURE, MACMILLAN JOURNALS LTGGB, vol. 423, 12 June 2003 (2003-0762-769, XP002277646	19-21,25				
A	ISSN: 0028-0836 the whole document	1-18, 22-24,26				
Ρ,Χ	WO 2004/061108 A (NISSAN CHEM; NAGAI RYOZO (JP); KAMON JYU FOR) 22 July 2004 (2004-07-22 abstract, Seq. Id. No. 3, drag 22/39 - 31/39	22				
X Furt	ther documents are listed in the continuation of box C.	Patent family members are listed	in annex.			
"A" docum consis "E" earlier filing g "L" docum which citatic "O" docum other "P" docum	ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but than the priority date claimed	cited to understand the principle or the invention "X" document of particular relevance; the cannot be considered novel or canno involve an inventive step when the document of particular relevance; the cannot be considered to involve an indocument is combined with one or ments, such combination being obvious in the art.	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled			
Date of the	actual completion of the international search 20 December 2004	Date of mailing of the international sea	Date of mailing of the international search report 2 9. 04: 05			
	mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,	Authorized officer Hoesel, H				



C.(Continua	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 2004/063711 A (BETH ISRAEL HOSPITAL; MANTZOROS CHRISTOS S (US)) 29 July 2004 (2004-07-29) p. 13, line 20 - p. 16, line 25, claims 29 - 32	19-21, 24-26
X	YAMAUCHI T ET AL: "The fat-derived hormone adiponectin reverses insulin resistance associated with both lipoatrophy and obesity" NATURE MEDICINE, NATURE PUBLISHING, CO, US, vol. 7, no. 8, August 2001 (2001-08), pages 941-946, XP002242792 ISSN: 1078-8956	19-21,25
A	Discussion	1-18, 22-24,26
Х	WO 02/072149 A (OKLAHOMA MED RES FOUND) 19 September 2002 (2002-09-19)	19-21,25
A	claims 1-20	1-18, 22-24,26

International application No. PCT/EP2004/010383

Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. X Claims Nos.: 18 - 26 (part.) because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: see FURTHER INFORMATION sheet PCT/ISA/210
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. X No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-18, 24-26 (part.)
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 18 - 26 (part.)

1. Present claims 19 - 21, 24 - 26 relate to a compound defined by reference to a desirable characteristic or property, namely to bind to or to regulate the activity of adiponectin receptor 2 ("adipoR2").

The claims cover all compounds having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT for only a very limited number of such compounds. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the compound by reference to a desired activity which definition does not allow to deduce any structural element or motif required to exert the desired activity. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the antibodies or antisense RNA/ribozymes.

2. The pertinent claims 18 - 26 relate to adipoR2 as diagnostic marker or therapeutical target for a broad variety of diseases. These uses indispensably require that the diagnostic target/therapeutical target is differentially expressed or functionally altered in diseased tissue (essential and generally sufficient criterion in respect of diagnostic uses, essential but non-sufficient criterion for therapeutical uses). The present application documents however provide support in terms of demonstration of differential expression in healthy vs. diseased tissue only for different forms of cancer and COPD. It is noted in this respect, that the application fails to provide a diagnostically significant association of adipoR2 expression with cardivascular disorders. The claims can therefore be searched and examined only to the extent they deserve substantial evidence by the description, i.e. insofar as diagnostic or therapeutic applications in conjunction with cancer diseases/COPD are concerned.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

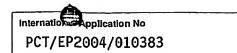
This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: claims 1-18,24-26 (part.)

adipoR2 as screening marker/diagnostic marker/therapeutical target in conjunction with cancer diseases $\frac{1}{2} \frac{1}{2} \frac{1}$

2. claims: claims 1-18,24-26 (part.)

adipoR2 as screening marker/diagnostic marker/therapeutical target in conjunction with ${\tt COPD}$



Patent document cited in search report		Publication date	Patent family member(s)		Publication date		
WO 200)4061108	A	22-07-2004	AU WO US	2003242352 2004061108 2004241802	A1	29-07-2004 22-07-2004 02-12-2004
WO 200)4063711	A	29-07-2004	US WO	2005059581 2004063711		17-03-2005 29-07-2004
WO 020	72149	A	19-09-2002	CA EP JP WO US	2440144 1372726 2004521930 02072149 2002132773	A1 T A1	19-09-2002 02-01-2004 22-07-2004 19-09-2002 19-09-2002